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Guatemala

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## NTS 71 - Section 45

Guatemala

## A. General

Veterinary animal health and public health services in Guatemala, as in most other Central American countries, are not well developed. A lack of well qualified veterinarians prevents the establishment of programs which could increase livestock productivity and sanitary distribution of products of animal origin.

Facilities and equipment are insufficient to insure proper handling of animal disease problems or to prevent the dissemination of food borne infections.

Guatemala has requested technical assistance from international organizations in the development of disease control and food processing programs on several occasions. Guatemala City (              ) is a zone headquarters for the Pan American Health Organization and a veterinarian is attached to this office.

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## B. Environmental factors affecting animal health

1. Topography and climate -- Guatemala's rugged mountainous and coastal humid, tropical plains seriously affect the adaptability and health of livestock. The intermediate but limited upland area of 2,000 - 5,000 foot elevation is well suited to livestock development. Lack of good quality fodder at higher elevations results in serious nutritional disorders. The humid tropical coastal areas provide excellent conditions for the propagation of numerous insect and parasitic pests which grossly affect livestock of all species.

2. Socio-economic pattern -- About two-thirds of the population of Guatemala are illiterate Indians, with little or no livestock raising experience. The few

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attempts by the government to introduce livestock schemes in the mountain areas among the Indians have resulted in failure because of lack of education and interest, and poor planning in providing proper animal health and nutritional requirements.

Guatemalans of European origin, in the mid-upland areas, have developed reasonably well cared for herds and flocks. Animal production development in the tropical lowland areas has generally failed as a result of similar poor planning to provide uninformed agricultural groups with means or methods of preventing undue exposure of animals to

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insects or parasites.

h. Nutrition

b. Food supply and distribution -- Inadequate attention to proper health care of animals seriously restricts the availability of milk and meat for the local

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population.

c. Food sanitation, storage, and technology -- Refrigerated storage and transport facilities for meat and dairy products are deficient, a condition limiting equitable distribution of animal products. With the exception of meat and dairy processing facilities in the immediate vicinity of the capital, practically all such installations are substandard in sanitary requirements. Open markets in the capital, itself, are grossly unsanitary. Meat and milk inspections, despite legal standards, are inefficient or lacking.

C. Diseases

2. Diseases of animals

a. Prevalent animal diseases -- Guatemalan livestock and poultry suffer from all the diseases common in countries throughout Central America, which may

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result in serious public health programs. Except for moderate private efforts on the part of a few wealthy livestock raisers, little or no attention is paid toward improved animal health. Government programs related to animal health are poorly organized, inadequately financed, and ineffectively operated.

(1) Tuberculosis -- Only a fraction of the bovine population has been tested for tuberculosis and the total incidence is probably much higher than the 2.27 percent recorded in 1959. Reactor rates to testing is much lower in the beef or range herds than in dairy animals. Tuberculosis has also been identified in birds and swine. The common practice of boiling milk, whether pasteurized or not, reduces the threat of milk borne infection to the human population.

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(2) Brucellosis -- Brucellosis is increasing in incidence in Guatemala. A 5.42% infection rate among the relatively small number of tested animals is nearly double that recorded a few years previously. Calfhood vaccination or other control measures are extremely limited. Pasteurization of milk is practiced in a few major dairies but, as in the case of tuberculosis, much of Guatemala's milk consuming population is protected against infections by the common practice of boiling milk.

The chief significance of this disease, aside from its threat to the occupational

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(3) Rabies -- Both canine and paralytic (bat) rabies are common throughout the country. Guatemala has conducted one of the most intensive canine vaccination and stray dog elimination programs in the Central American area, and the reduction in the number of reported cases of rabies is significant. However, paralytic (bat) rabies remains enzootic in many areas. Bovines, particularly young animals, are vulnerable and consequently suffer quite serious losses. A large-scale vaccination

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program has been undertaken in a few purebred herds using the high egg passage (HEP)

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Flury chicken embryo vaccine.

(4) Anthrax -- Periodic outbreaks of anthrax cause serious animal losses in localized areas as a result of failure to maintain annual vaccination schedules.

Although the government laboratory in Guatemala City produces sufficient quantities of vaccine, distribution and application in the field is not well organized. No supervision over disposal of anthrax infected carcasses is carried out. In addition,

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the marketing of infected hides or skins perpetuates anthrax.

(5) Piroplasmosis -- Piroplasmosis (cattle tick fever) is one of the most serious cattle diseases in Guatemala. This disease, seriously affecting introduced European or American types of cattle, adversely influences breeding development schemes. Although Zebu and local type cattle are less acutely affected, the disease takes a heavy toll through debility. Tick control measures, the basic for control of piroplasmosis, have not been widely practiced and treatment for the disease is seldom

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undertaken.

(6) Dermatobiaasis (Torsola) -- Torsola, the Central American term for the larval stage of Dermatobia hominis infestation in cattle, occurs frequently in the mid-elevation areas of Guatemala. In addition to its serious destruction of hides, this parasitic condition causes severe debility and discomfort to affected animals.

It is so widespread that the leather industry is forced to rely on imported products

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for top quality material.

(7) Newcastle disease -- Newcastle disease is probably the most serious avian malady in Guatemala. Its effect in terms of control costs in the recently developing broiler and concentrated egg laying industries have imposed a heavy

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burden and its consequences in farm flock production have seriously reduced this important activity. Vaccination among small dispersed flocks is costly and inefficient under present conditions, and the government has not yet organized a sound control program.

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(8) Hog cholera -- Hog cholera is widespread throughout the country. A few larger swine producers vaccinate routinely against the disease, but the small farmers carrying one or two pigs seldom take this necessary precaution. Consequently, overall losses from hog cholera are high.

b. Other important diseases.-- Mastitis, blackleg, anaplasmosis, cysticercosis, and lung worms are other important disease or parasite conditions of cattle. Several domestic animal species are affected by salmonellosis, non-specific pneumonia and enteritis. Young animals are particularly susceptible to a variety of parasitic infestations.

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D. Veterinary medical organization and administration

1. Civilian

a. Organization -- Primary veterinary services are the responsibility of the Director General of Livestock in the Ministry of Agriculture. This unit of the Ministry employs virtually all of the veterinarians in Guatemala on a full or part-time basis. The Ministry of Public Health's Director General of Public Health supervises a Department of Veterinary Public Health which employs three veterinarians. Only one of those is actually a full-time employee and the rest work, as well, for the Director General of Livestock or in other capacities. The three so-called full-time teachers at the Veterinary Faculty of the University of San Carlos ( ) are engaged in other duties, either official or private, as well as the five part-time

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teachers.

These trans-departmental or trans-institutional responsibilities, coupled with the critical shortage of veterinarians, lead to a chaotic condition so far as animal disease control or veterinary public health measures are concerned.

At least thirteen of Guatemala's small force of twenty-two veterinarians are engaged in some form of private practice far more remunerative than the public services in which they are either retained on part- or full-time basis.

Only four of the veterinary staff in state services are assigned field tasks, but their prescribed duties are vague and supervision is lax to an extent rendering activities ineffective. Many areas are completely isolated from effective veterinary services even in emergency.

The only slaughterhouse in Guatemala enjoying permanent veterinary inspection is the newly constructed plant at Lavarreda ( ), near Guatemala City.

Port and airport quarantine and inspection are cursory at best, and Guatemala is continuously subjected to re-introduction of animal disease through the constant flow of livestock from outside its borders.

b. Legal controls

(1) Licensure -- Guatemala has for many years recruited veterinarians from various foreign countries, without licensure requirement. Since no veterinarians have yet been graduated from the University of San Carlos, no official licensure requirements have been established.

(2) Quarantine -- Various regulations regarding the import, export or marketing of livestock and livestock products have been established as decrees. These decrees are as often promulgated for economic reason, as for the protection of

animal or human health.

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(3) Inspection -- A recent decree, literally a copy of United States Department of Agriculture Meat Inspection Regulations, recently effective, is intended by Guatemalan authorities to prepare national slaughterhouses for meat export certification to the United States.

Guatemala subscribes to the animal health and quarantine regulations recommended by the Organization International Regional for Agricultural Sanitation (OIRSA), but fails to carry out these recommendations.

c. Professional organizations -- There is no evidence of the existence of a permanent formal veterinary association or organization.

d. Veterinary medical research -- Veterinary medical research is practically non-existent in Guatemala. Within the new Veterinary Faculty at the University of San Carlos research has not been inaugurated because the small faculty is either fully occupied with teaching duties or in pursuing outside activities.

e. Emergency veterinary medical services -- Organization of emergency veterinary services has not been attempted in Guatemala.

f. Veterinary military services -- No veterinary medical military services exist in Guatemala.

#### B. Veterinary manpower

Guatemala has a current veterinary force of 22 foreign trained personnel. Twenty-one are full- or part-time employees of the Director General of Livestock in the Ministry of Agriculture. Most of the veterinarians engaged in this unit have additional responsibilities on a part-time basis in the Ministry of Public Health, private practice or in teaching at the Veterinary Faculty.

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The ratio of veterinarians to livestock numbers by any reasonable standard is low, and it will be many years before a reasonably adequate force of competently trained veterinarians is available.

The Veterinary Faculty at the University of San Carlos is numerically completely inadequate and does not meet basic minimum teaching standards. Teaching facilities are deficient and clinical material is extremely poor. The only possibility of rectifying the grossly inadequate veterinary teaching condition is through regional collaboration whereby other Central American countries financially support development programs. Furthermore, even with such support, it would be necessary to recruit

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veterinary faculty from outside sources for a number of years.

#### F. Veterinary medical facilities

Veterinary facilities for diagnostic work, vaccine production or animal care are extremely inadequate in Guatemala. A small overcrowded laboratory near Guatemala City attempts to carry out field diagnostic work and produce small quantities of anthrax vaccine. Agricultural stations throughout the country have been equipped with moderate facilities for routine diagnostic work, but most of these are neglected or not used at all.

The United Fruit Company has maintained small clinics for livestock care in some of their cattle raising areas. These are not effectively utilized.

#### G. Veterinary supplies and materials

Most of Guatemala's veterinary biological and pharmaceutical supplies are either imported by the government or obtained through agencies distributing for various foreign firms. United States producers supply the bulk of such commodities and Guatemalan veterinarians generally act as agents for particular firms. Drug or biological production locally is extremely limited and intermittent.

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H. Reference data -- Not included in this report.

I. Comments on principal sources

1. Evaluation -- Source material on veterinary subjects is general in nature.

Accurate disease reports, specific organization and definition of veterinary responsibilities are lacking. No information on the exact volume of veterinary products and supplies used is available.

2. List of sources (in order of importance)

- (1) United Nations, Food and Agriculture Organization. Report of the International Meeting on Veterinary Education. Held in London, United Kingdom 25 to 30 April 1960. Rome. April 1960. (Unclassified)
- (2) United Nations, Food and Agriculture Organization/Office of International Epizootics. FAO/OIE Animal Health Yearbook 1959. Rome. 1960. (Unclassified)
- (3) International Regional Committee for Health on Agriculture and Livestock. Infermedades Transmisibles de los Animales Domésticos en Centro América 1956. (Transmissible Diseases of Domestic Animals in Central America, 1956). Nicaragua. 1956. (Unclassified)
- (4) International Regional Committee for Agricultural Sanitation. Comité Internacional Regional de Sanidad Agropecuaria, (Third Report of the International Regional Committee for Agricultural Sanitation). vols. I, II and III. Tegucigalpa, D. C., Honduras. 1956. (Unclassified)
- (5) University of San Carlos. Universidad de San Carlos, (Quarterly Publication of the University of San Carlos). Guatemala. 1957-1958. (Unclassified)

[redacted] 50X1

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17. Universidad de San Carlos. (Quarterly Publication of the University of San Carlos). Guatemala. 1957-1958. (Unclassified)
18. Boletin Estadistico (Statistical Bulletin). Nos. 11-12. Director General of Statistics. Guatemala. 1959. (Unclassified)
19. Comite Internacional Regional de Sanidad Agropecuaria (Second Report of the International Regional Committee for Agricultural Sanitation). vol. I. San José, Costa Rica. 1956. (Unclassified)
20. Comite Internacional Regional de Sanidad Agropecuaria (Third Report of the International Regional Committee for Agricultural Sanitation). vols. I, II and III. Tegucigalpa, D.C., Honduras. 1956. (Unclassified)
21. United Nations Food and Agriculture Organization and The Inter-American Institute of Agricultural Sciences. Report of a Meeting on the Organization of Agricultural Research in the Central American Countries, Mexico and Panama. Held in Turrialba, Costa Rica, 5-10 December 1955. Turrialba, Costa Rica. January 1956. (Unclassified)
22. U.S. Department of Agriculture, Foreign Agricultural Service. "Guatemala Plans Beef Exports to U.S." Foreign Crops and Markets. vol. 80, no. 13. Washington, D. C. March 28, 1960. (Unclassified)
23. U.S. Department of Agriculture, Foreign Agricultural Service. "Guatemala Announces Plans to Import Canadian Dairy Cattle." Foreign Crops and Markets. vol. 73, no. 2. Washington, D. C. July 9, 1956. (Unclassified)
24. Coyner, Mary S. Guatemala: Its Agricultural Production and Trade. FAS-M-51. Foreign Agricultural Service, U.S. Department of Agriculture. Washington, D. C. April 1959. (Unclassified)
25. U.S. Department of Agriculture. Foreign Agricultural Service Report No. AGR 68. "Threat of Foot-and-Mouth Disease from Cuba." Guatemala. December 16, 1960. (Unclassified)
26. U.S. Department of Agriculture. Foreign Agricultural Service Report No. AGR 37. "Guatemala - National Cattlemen's Association Formed." Guatemala. October 10, 1960. (Unclassified)
27. U.S. Department of Agriculture. Foreign Agricultural Service Report No. AGR 114. "Guatemala - Foremost Dairies Inc. Formally Constituted." Guatemala. May 21, 1960. (Unclassified)
28. U.S. Department of Agriculture. Foreign Agricultural Service Report No. AGR 88. "Guatemala - Livestock and Meat Products Annual." Guatemala. February 25, 1960. (Unclassified)
29. U.S. Department of Agriculture. Foreign Agricultural Service Report No. AGR 73. "Reorganization of Ministry of Agriculture." Guatemala. January 12, 1960. (Unclassified)
30. U.S. Department of Agriculture. Foreign Agricultural Service Report No. AGR 134. "Guatemala - Asuncion Milk Plant expected to operate in September." Guatemala. May 25, 1959. (Unclassified)
31. U.S. Department of Agriculture. Foreign Agricultural Service Report No. AGR 120. "Guatemala - Dairy." Guatemala. May 5, 1959. (Unclassified)
32. U.S. Department of State. Foreign Service Despatch No. 127. "Inspection of Slaughterhouses in Guatemala." Guatemala. September 19, 1960. (Unclassified)
33. U.S. Department of State. Foreign Service Despatch No. 539. "Regulation to Control Fresh Milk." Guatemala. March 4, 1958. (Unclassified)
34. U.S. Department of State. Incoming Airgram No. G-25. "Newcastle Disease." Guatemala. August 25, 1960. (Unclassified)
35. U.S. Department of State. Incoming Airgram No. G-79. "Newcastle Disease." Guatemala. May 25, 1960. (Unclassified)

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